## BEST AVAILABLE COPY

#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

#### (19) World Intellectual Property Organization

International Bureau



## ) | 1001 | 11110 | 10110 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 |

(43) International Publication Date 29 December 2004 (29.12.2004)

PCT

# (10) International Publication Number WO 2004/113886 A1

(51) International Patent Classification<sup>7</sup>: 33/543, 35/00, B01L 3/00

G01N 21/55,

(21) International Application Number:

PCT/IB2004/050895

(22) International Filing Date:

14 June 2004 (14.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03101893.0

25 June 2003 (25.06.2003) E

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PRINS, Menno Willem Jose [NL/DE]; c/o Philips Intellectual Property &, Standards GmbH Weisshausstr. 2, 52066 Aachen (DE). SCHLEIPEN, Johannes Joseph Hubertina Barbara [NL/DE]; c/o Philips Intellectual Property &, Standards GmbH Weisshausstr. 2, 52066 Aachen (DE). (74) Agent: MEYER, Michael; Philips Intellectual Property &, Standards GmbH Weisshausstr. 2, 52066 Aachen (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

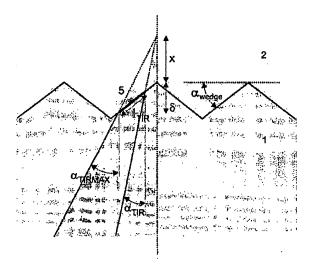
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

[Continued on next page]

(54) Title: SUPPORT WITH A SURFACE STRUCTURE FOR SENSITIVE EVANESCENT-FIELD DETECTION



(57) Abstract: The present invention is concerned with a support (1), in particular an optical disc, with a surface structure for the detection of at least one optically-active substance within the evanescent-field (5) at one surface of the support (1), whereby the surface structure allows the generation of an evanescent-field (5) in a medium (2) adjacent to the surface structure. The surface structure comprises one or more sections of the surface of the support (1), which are inclined (oxwedge) with respect to the general orientation of the surface of the support (1). The invention also concerns a device employing such a support (1) with a surface structure, in particular an optical disc and uses of the support (1) with a surface structure and the device.

O 2004/113886 A1

### WO 2004/113886 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.